Water Resources at Fort Hood

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Presented by the DPW Water Program

Who is in charge of water?

- NATIONAL LEVEL: Environmental Protection Agency (EPA).
- STATE LEVEL: Texas Commission on Environmental Quality (TCEQ).
 - Regulated by permits and state requirements.
 - Requirements met by monitoring, inspecting, training, and reporting.

Types of water on Ft. Hood:

Storm Water

Drinking Water

Wastewater











Wastewater Treatment Facility



Discharge into **Environment**



Drinking Water 20 Distribution **System**



Drinking Water Plant



Belton Lake or another water supply source

What is storm water?

- Runoff that occurs with natural precipitation and drains to creeks/lakes UNTREATED
- State permit authorizes Ft. Hood to discharge storm water to surface waters in the state



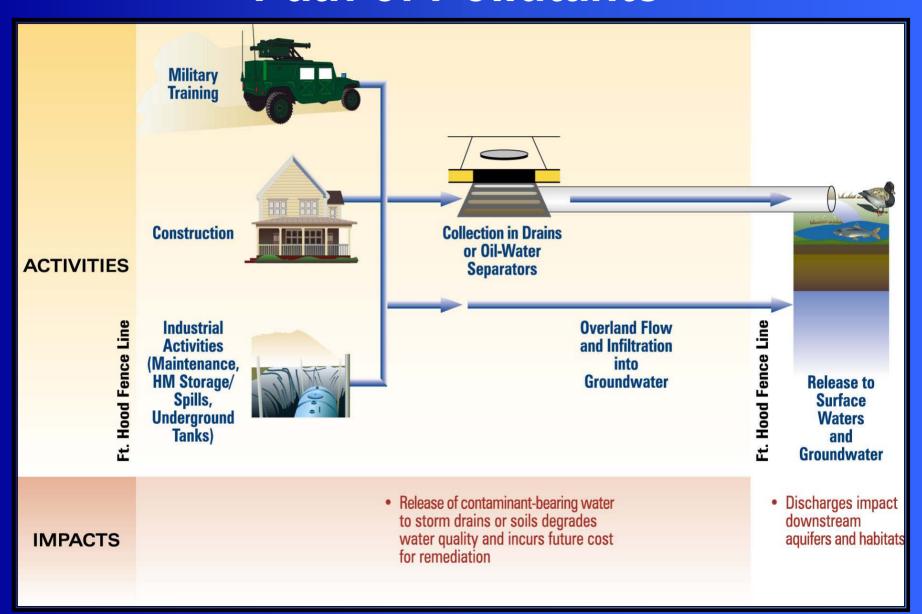
 BMPs (Best Management Practices) used to meet requirements of permit

Pollutants in storm water

- Oil and grease, antifreeze, and other vehicle fluids
- Trash and debris
- Soil and dirt
- Metals
- Pesticides and fertilizers
- Polluted storm water can:
 - Impair recreational water areas (i.e. Belton Lake)
 - Harm/kill fish, wildlife, and native vegetation
 - Pollute ground water and drinking water



Path of Pollutants



- STOP Illegal Dumping by:
 - Using the Used Product Reclamation Points or contact DPW Classification Unit, 288-7627, for disposal.
 - NO dumping into the OWS (Oil-Water Separator).
 - It is prohibited to dump petroleum or other hazardous products willfully on the ground, sewer system, or surface waters (CWA Sec. 309, FH Reg 420-2 Sec. 5-1).





- Practice good housekeeping by:
 - Picking up trash (including OWS).
 - Using drip pans & proper PMCS.
 - Requesting timely service of OWS from DPW.
 - Containing spills away from storm water conveyances and OWS.
 - Keeping soil stockpiles away from storm water conveyances and fences.





- Practice good lawn care by:
 - Obtaining Fertilizers, Herbicides/
 Pesticides from HAZMART only
 - Applying each product according to manufacturers label & never before rain



- Using herbicides/pesticides for <u>SPOT APPLICATIONS ONLY</u>
 - Contact DPW, Services Branch, Pest Control, 287-7294, for larger area applications
- Keep lawn clippings away from storm water conveyances

- Maintain clean vehicles by:
 - Utilizing the Central Wash Racks first; DO NOT use chemicals, detergents, or solvents.
 - Using authorized detergents for unit motor pool wash racks only, obtain from HAZMART.
 - Washing POV at a commercial car wash or where water flows to grass.





Drinking Water



Fort Hood Drinking Water

- Surface water from Belton Lake
- Purchase treated water from Bell County
- FH conducts routine sampling for bacteria and chlorine residual



Water Storage at Fort Hood



- Fort Hood maintains 20 storage tanks, nine of which are elevated
- The 20 tanks have a total capacity of approximately 12,500,000 gallons

Fort Hood Water, an Unlimited Source?



- Last year, Ft Hood averaged 6.2 million gallons of water per day
- We have reached our maximum allowable limit several times in the past

Help Conserve Water



- Don't water the lawn during the hottest part of the day
- Don't over water the lawn.
 Water the lawn every 3-5 days in the summer and 10-14 days in the winter
- Don't let water run at the vehicle washracks, turn off the water when done

What is a Cross-Connection?



When potable water has a potential for coming in contact with contaminated water it is a <u>cross</u> connection

A pipeline break in the area could suck this soapy water back up into the potable water supply

Backflow Prevention

Devices used to prevent industrial water from backing up into the potable water supply are called <u>backflow</u> preventers



Backflow Devices





Cross-Connection Incident

Thousands of cross-connections occur annually. Only those that end in loss of life or serious illness do you ever hear about

 Backflow incident – Fort Hood Texas, July 2003

Prevent Cross Connections



- Remove hoses from unprotected sinks
- Don't leave hoses laying on the ground
- Don't remove vacuum breakers from hose bibbs

Prevent Cross Connections (cont)







Water Leak Hotline



Report All Water Leaks!

Call DPW at 287-2113

What is waste water?



- Wastewater: contaminated water resulting from a known process.
- Examples:
 - Domestic sewage.
 - Water from oil-water separators.
 - Water from treatment facilities.
 - Water from industrial facilities.

2003 Water



Sanitary sewer overflow near housing area on Fort Hood

- Do not dispose of grease down sinks.
- Minimize the use of garbage disposals.
- Use cleaners and harsh chemicals sparingly.
- Do not use detergents excessively.
- Dispose of all chemicals properly.
- Turn off faucets when not in use.

Not following these steps can lead to interruptions in the wastewater treatment process and can cause sewer overflows.

THE PRICE OF WATER

\$1 million per year to purchase water



\$1.2 million per year for treatment

Nastewater Treatment

\$3,915,000 per

year for water

\$1.7 million per year to maintain system



Drinking Water Plant Water



Environment



Belton Lake or another water supply source

Questions?



- Program Manager:
 - Mr. Riki Young @ 287-8712
- Storm water:
 - Stacy Pintor @ 287-9812
 - Valorie Michna @ 618-8888
- Drinking water:
 - Gary Goodman @ 287-4256